RAMPAGE V EXTREME/U3.1

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Print

Intel® Socket 2011-v3 Core™ i7 Processors Supports Intel® 22 nm CPU

Supports Intel® Turbo Boost Technology 2.0

- * The Intel® Turbo Boost Technology 2.0 support depends on the CPU types.
- * Refer to www.asus.com for CPU support list

Chipset

Intel® X99

8 x DIMM, Max. 64GB, DDR4 3300(O.C.)/3000(O.C.)/2800(O.C.)/2666(O.C.)/2400(O.C.)/2133 MHz Non-ECC, Un-buffered Memory

Quad Channel Memory Architecture

Supports Intel® Extreme Memory Profile (XMP)

- * Hyper DIMM support is subject to the physical characteristics of individual CPUs.
- ** Refer to www.asus.com for the Memory QVL (Qualified Vendors Lists).

Multi-GPU Support

Supports NVIDIA® 4-Way SLI™ Technology *1

Supports NVIDIA® 3-Way SLI™ Technology

Supports NVIDIA® SLI™ Technology

Supports AMD 4-Way CrossFireX Technology

Supports AMD 3-Way CrossFireX™ Technology

Supports AMD CrossFireX™ Technology

4 x PCle 3.0/2.0 x16 (x16, x16/x16, x16/x8/x8 or x16/x8/x8/x8 mode with 40-LANE CPU; x16, x16/x8, x8/x8/x8 mode with 28-LANE CPU) $^{*^2}$ 1 x PCle 2.0 x16 (x4 mode) $^{*^3}$ 1 x PCle 2.0 x1 $^{*^3}$

Storage

New Intel® Core™ i7 Processors:

1 x M.2 Socket 3, , with M Key, type 2260/2280/22110 storage devices support (Supports PCIE SSDs only)

Intel® X99 chipset:

1 x SATA Express port, red, compatible with 2 x SATA 6.0 Gb/s ports

8 x SATA 6Gb/s port(s), red, *⁴,

Supports Intel® Smart Response Technology, Intel® Rapid Recovery Technology*5

ASMedia® SATA Express controller: *6

1 x SATA Express port, red, compatible with 2 x SATA 6.0 Gb/s ports

Intel® I218V, 1 x Gigabit LAN Controller(s), featuring GAMEFIRST III Intel® LAN- Dual interconnect between the Integrated LAN controller and Physical Layer (PHY) Anti-surge LANGuard

Wireless Data Network

Wi-Fi 802.11a/b/g/n/ac Supports dual band frequency 2.4/5 GHz Up to 1300Mbps transfer speed

Bluetooth V4.0

Audio

ROG SupremeFX 8-Channel High Definition Audio CODEC

- Supports: Jack-detection, Multi-streaming, Front Panel Jack-retasking
- SupremeFX Shielding Technology
- ELNA® premium audio capacitors

Audio Feature:

- Blu-ray audio layer Content Protection
- DTS Connect

- Optical S/PDIF out port(s) at back panel
- Sonic SoundStage
- Sonic SenseAmp
- Sonic Studio
- Sonic Radar II

Intel® X99 chipset:

4 x USB 3.0 port(s) (4 at mid-board)

Intel® X99 chipset: *7

6 x USB 2.0 port(s) (2 at back panel, black, 4 at mid-board)

ASMedia® USB 3.0 controller: *8

10 x USB 3.0 port(s) (10 at back panel, blue)

OC Panel

2.6 " LCM display

EXTREME/NORMAL mode switch

EXTREME Mode for subzero OC benching:*⁹

- VGA Hotwire
- Subzero Sense
- Slow Mode
- Pause Switch
- VGA SMB header
- Probelt
- 4 x 4-pin extra fan connectors

NORMAL Mode for in-chassis usage:*10

- CPU Level Up OC button
- FanSpeed control button
- LCM backlight on/off button

I/O Ports:

- POWER: 1 x SATA power connector
- ROG_EXT port: 1 x 18-1 pin data connection port

DirectCU thermal design

ROG Connect:

- RC Diagram
- RC Remote
- RC Poster

Extreme Engine Digi+ IV:

- IR3555 PowelRstage®
- MicroFine Alloy Chokes
- 10K Black Metallic Capacitors

ROG Extreme OC kit:

- ReTry button
- Safe Boot button
- Start button
- Reset button
- Slow Mode
- LN2 Mode
- PCle x16 Lane Switch
- Debug LED

Probelt

KeyBot

- CPU Level Up
- XMP
- Direct Key

UEFI BIOS features:

- ROG BIOS Print
- GPU.DIMM Post
- Tweakers' Paradise
- ROG SSD Secure Erase
- Graphic Card Information Preview

ROG RAMDisk

GameFirst III

iROG

Extreme Tweaker

USB BIOS Flashback

Overclocking Protection:

- COP EX (Component Overheat Protection EX)
- Voltiminder LED II

Special Features

ASUS Exclusive Features:

- MemOK!
- Al Suite 3
- Ai Charger+
- USB Charger+
- USB 3.1 Boost
- Disk Unlocker

Back I/O Ports

- 1 x PS/2 keyboard/mouse combo port(s)
- 1 x LAN (RJ45) port(s)
- 10 x USB 3.0 (blue)
- 2 x USB 2.0 (one port can be switched to ROG Connect)
- 1 x Optical S/PDIF out
- 5 x Audio jack(s)
- 1 x Clear CMOS button(s)
- 1 x ROG Connect On/ Off switch(es)
- 1 x ASUS Wi-Fi GO! module (Wi-Fi 802.11 a/b/g/n/ac and Bluetooth v4.0
- 2 x USB 3.0 connector(s) support(s) additional 4 USB 3.0 port(s)
- 2 x USB 2.0 connector(s) support(s) additional 4 USB 2.0 port(s)
- 2 x SATA Express connector: red, with M key, type 2242/2260/2280 storage devices support (both SATA & PCIE mode)
- 1 x M.2 Socket 3 for M Key, type 2260/2280/22110 storage devices support (Support PCIE SSD only)
- 1 x TPM header
- 8 x SATA 6Gb/s connector(s)
- 1 x CPU Fan connector(s) (1 x 4 -pin)
- 1 x CPU OPT Fan connector(s) (1 x 4 -pin)
- 6 x Chassis Fan connector(s) (6 x 4 -pin)
- 1 x Thunderbolt header(s)
- 1 x 24-pin EATX Power connector(s)
- 1 x 8-pin ATX 12V Power connector(s)
- 1 x 4-pin ATX 12V Power connector(s)
- 1 x Front panel audio connector(s) (AAFP)
- 1 x System panel(s) (Q-Connector)
- 1 x MemOK! button(s)
- 1 x Slow Mode switch(es)
- 9 x Probelt Measurement Points
- 3 x Thermal sensor connector(s)
- 1 x EZ Plug connector(s) (4-pin Molex power connector)

- 1 x Power-on button(s)
- 1 x Reset button(s)
- 1 x BIOS Switch button(s)
- 1 x LN2 Mode jumper(s)
- 1 x ROG extension (ROG_EXT) header(s)
- 1 x KeyBot Button
- 1 x Sonic SoundStage Button
- 1 x Safe Boot button
- 1 x ReTry button

Accessories

User's manual

I/O Shield

10 x SATA 6Gb/s cable(s)

- 1 x ASUS 3T3R dual band Wi-Fi moving antennas (Wi-Fi 802.11a/b/g/n/ac compliant)
- 1 x 3-Way SLI bridge(s)
- 1 x 4-Way SLI bridge(s)
- 1 x SLI bridge(s)
- 1 x CrossFire cable(s)
- 1 x Q-connector(s) (2 in 1)
- 1 x ASUS USB 3.1 CARD(2-ports Type A)
- 3 x Thermal sensor cable pack(s)
- 1 x 12 in 1 ROG Cable Label(s)
- 1 x X-Socket 2 kit
- 1 x ROG Door Hanger(s)

OC Panel Kit:

- 1 x OC Panel(s)
- 1 x OC Panel 5.25-inch bay metal case
- 1 x OC Panel Cable(s)
- 1 x OC Panel screw pack(s)

2 x 128 Mb Flash ROM, UEFI AMI BIOS, PnP, DMI2.7, WfM2.0, SM BIOS 2.8, ACPI 5.0, Multi-language BIOS, ASUS EZ Flash 2, CrashFree BIOS 3, F11 EZ Tuning Wizard, F6 Qfan Control, F3 My Favorites, Quick Note, Last Modified log, F12 PrintScreen, F3 Shortcut functions and ASUS DRAM SPD (Serial Presence Detect) memory information.

Manageability

WfM2.0, DMI2.7, WOL by PME, PXE

Drivers

ROG GameFirst III

ROG RAMDisk

ROG CPU-Z

ROG Mem Tweaklt

Kaspersky® Anti-Virus

DAEMON Tools Pro Standard

ASUS WebStorage

HomeCloud

ASUS Utilities

Form Factor

Extended ATX Form Factor
12 inch x 10.7 inch (30.5 cm x 27.2 cm)

- 1. 28-LANE CPUs can only support up to 3-Way SLI™/ 3-Way CrossFireX™
- 2. The PCIE X8 4 slot shares bandwidth with M.2 x 4.
- 40-LANE CPU: The PCIeX8_4 slot can only be used in x4 mode or lower when used simultaneously with the M.2 connector. If x8 mode is used, the two connectors will be mutually exclusive.
- 28-LANE CPU: The PCIE_X8_4 slot will be disabled and the M.2 connector will always be enabled.
- 3. The PCIE_X4_1 (gray) slot shares bandwidth with the PCIE_X1_1 slot, USB3_E910 and SATAExpress_E1 connector. When the PCIE_X4_1 slot is occupied by an X1 or X2 device, the SATAEXPRESS_E1 will be disabled. When the PCIE_X4_1 slot is occupied by X4 device, the SATAEXPRESS_E1, USB3_E910 ports, and the PCIE_X1_1 slot will be disabled.
- 4. Due to chipset behavior, the SATA6G_78, SATA6G_910 ports do not support IRST including RAID configuration.
- 5. These functions will work depending on the CPU installed.
- 6. These SATA ports share bandwidth with the PCIE_X4_1 slot, and when the PCIE_X4_1 slot is occupied, the SATA ports will be disabled. These SATA ports are for data hard drives only. ATAPI devices are not supported.
- 7. 2 x USB2.0 port at mid-board shares with ROG extension (ROG_EXT) port.
- 8. USB3_E910 ports at back panel will be disabled when the PCIE_X4_1 slot is occupied by an X4 bandwidth device.
- 9. Extreme Mode capabilities, including V1, V2, DRAM and other voltage definitions, vary by

chipset. Please refer to your motherboard manual for details.

10. One 5.25" drive bay is required for NORMAL Mode installation.